

1 **Claims**

2 1. A selective one-way wrench comprising:

3 a handle;

4 an annular head from which the handle projects, the annular head
5 defines a first space and a second space communicated with the first
6 space;

7 a gear rotationally put in the first space, the gear including a toothed
8 external face;

9 a direction controller put in the second space, the direction controller
10 including two pawls and a spring installed between the pawls each
11 including a rod formed thereon and a toothed face;

12 a driver put rotationally in the second space, the driver including two
13 fingers selective one of which contacts the rod of selective one of the
14 pawls so as to bring the toothed face of the selected pawl into
15 engagement with the toothed external face of the gear; and

16 a direction switch installed rotationally on the annular head and
17 operably connected with the driver.

18 2. The selective one-way wrench according to claim 1 wherein the
19 direction switch includes a lever that is operable for the rotation
20 thereof.

21 3. The selective one-way wrench according to claim 1 including a
22 countersink hole communicated with the second space, and the
23 direction switch is inserted into the second space through the
24 countersink hole.

25 4. The selective one-way wrench according to claim 3 wherein the
26 direction switch includes a disc and a shaft extending from the disc,

1 and the driver is attached to the shaft.

2 5. The selective one-way wrench according to claim 4 wherein the
3 direction switch further includes a ridge extending from the shaft,
4 the driver defines a recess for receiving the ridge.

5 6. The selective one-way wrench according to claim 1 wherein each of
6 the pawls defines a recess for receiving an end of the spring.

7 7. The selective one-way wrench according to claim 3 including a
8 C-ring, wherein the direction switch defines an annular groove in an
9 external side for receiving an internal edge of the C-ring, and the
10 annular head defines an annular groove in the wall of the
11 countersink hole for receiving an external edge of the C-ring.

12 8. The selective one-way wrench according to claim 1 wherein the
13 gear is an annular gear.

14 9. The selective one-way wrench according to claim 1 wherein the
15 gear includes an insert for insertion into a socket.

16 10. The selective one-way wrench according to claim 9 including a
17 detent attached to the insert for contact with the socket.

18 11. The selective one-way wrench according to claim 10 including a
19 control device for controlling the movement of the detent.

20 12. The selective one-way wrench according to claim 11 wherein the
21 control device includes an aperture defined in the insert for trapping
22 the detent, a space defined in the insert and communicated with the
23 aperture and a rod movable in the space for pushing the detent from
24 the aperture.

25 13. The selective one-way wrench according to claim 12 wherein the
26 annular head defines an aperture through which the rod is inserted

1 into the space defined in the insert.

2 14. The selective one-way wrench according to claim 13 wherein the
3 rod includes a hole for receiving the detent in the withdrawn
4 position.

5 15. The selective one-way wrench according to claim 14 wherein the
6 control device includes a spring compressed between a portion of
7 the rod and a portion of the gear.

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